

# Jie (Joyce) WANG

*Electron Microscopy Center Facility Manager  
Center for Nanoscale Materials  
Nanoscience & Technology  
Argonne National Laboratory  
Building 212-D15  
9700 S. Cass Avenue, Lemont, IL 60439  
(630) 252-7900 ★ [jiewang@anl.gov](mailto:jiewang@anl.gov)*

## EDUCATION

<b>Texas A&amp;M University</b> , College Station, TX	
M.E., Materials Science & Engineering	2008
<b>Hong Kong University of Science &amp; Technology</b> , Hong Kong SAR, China	
M.S., Physics	2006
<b>Shanghai Jiao Tong University</b> , Shanghai, China	
B.S., Applied Physics	2004

## WORK AND RESEARCH EXPERIENCE

<b>Argonne National Laboratory</b> , Argonne, IL	Since 2015
Electron Microscopy Center Facility Manager	
<b>Corning Inc.</b> , Corning, NY	
Sr. Scientist / Material Scientist	2008–2015
<b>Texas A&amp;M University</b> , College Station, TX	2006–2008
Research Assistant in Electrical and Computer Engineering Department	
<b>Hong Kong University of Science &amp; Technology</b> , Hong Kong SAR, China	
Research Assistant in Physics Department	2004–2006

## PUBLICATIONS AND IMPORTANT PRESENTATIONS

Alex Y. Song, Rajaram Bhat, Andrew A. Allerman, Jie Wang, Tzu-Yung Huang, Chung-En Zah, and Claire F. Gmachl, *Quantum cascade emission in the III-nitride material system designed with effective interface grading*, Applied Physics Letters, 107, 132104, 2015.

Sujat Sen, Vijay Govindarajan, Christopher J. Pelliccione, Jie Wang, Dean J. Miller, and Elena V. Timofeeva, *Surface Modification Approach to TiO<sub>2</sub> Nanofluids with High Particle Concentration, Low Viscosity, and Electrochemical Activity*, ACS Applied Materials & Interfaces, 7 (37), pp 20538-20547, 2015

J. Wang, Lingyan Wang, Ann Ferrie, Yan Jin, *Visualizing Structure of Bio-Functional Magnetic Nano-Particles with Analytical Electron Microscopy*, 156, SFB 2015.

Feng Xie, Catherine G. Caneau, Herve P. LeBlanc, Ming-tsung Ho, Jie Wang, Satish Chaparala, Lawrence C. Hughes, and Chung-en Zah, *High power and high temperature*

*continuous-wave operation of distributed Bragg reflector quantum cascade lasers*, Applied Physics Letters, 104, 071109, 2014.

Q. Fu, J. Wang, B. Wheaton, K. Geisinger, *Crystallization mechanism of Lithium Aluminosilicate (LAS) glass ceramics: nucleation, viscosity and microstructure*, 10th Pacific Rim Conference on Ceramic and Glass Technology, PACRIM10-SB-023-2013.

Gary Li, Lingyan Wang, Andrew Bradshaw, Fang Lai, Yan Jin, Joyce Wang and Bassam El-Fahmawi, *An Efficient Way to Prepare DNA from Large Volume Samples*, WDD 17: Next Generation DNA Sequencing (NGS) and Microarray, 2013 World DNA and Genome Day.

Dmitry Sizov, Rajaram Bhat, Jie Wang, Donald Allen, Barry Paddock, Chung-En Zah, *Development of semipolar laser diode*, Physica Status Solidi A, Volume 210, Issue 3, pages 459–465, March 2013.

Jie Wang, Chen-Fong Tsai, Zhenxing Bi, D. Naugle and Haiyan Wang, *Microstructural and Pinning Properties of  $YBa_2Cu_3O_{7-\delta}$  Thin Films Doped with Magnetic Nanoparticles*, IEEE Trans. Appl. Supercond. 19, 3503-3506, 2009.

Haiyan Wang and Jie Wang, *Interfacial Defects and Flux-Pinning Effects in Nanostructured  $YBa_2Cu_3O_{7-\delta}$  Thin Films*, IEEE Trans. Appl. Supercond. 19, 3395, 2009.

J. Wang, J.H. Kwon, J. Yoon, H. Wang, T.J. Haugan, F.J. Baca, N.A. Pierce, P.N. Barnes, *Flux Pinning in  $YBa_2Cu_3O_{7-\delta}$  Thin Film Samples Linked to Stacking Fault Density*, Appl. Phys. Lett. 92, 082507, 2008.